

ABSTRACT OF THE DISCLOSURE

Disclosed is a method for correcting the measurement signal of a mass flowmeter for flowing media of the type which works on the Coriolis principle and has at least one straight measuring tube conveying the flowing medium, at least one oscillation generator acting on the measuring tube, at least one measurement value sensor detecting Coriolis forces and/or Coriolis oscillations based on Coriolis forces and outputting a measurement signal and a supporting tube accommodating the measuring tube, the oscillation generator and the measurement value sensor, whereby the measuring tube and the supporting tube are connected to one another in a manner excluding relative axial movements and the axial spacing of the fixing points of the supporting tube on the measuring tube represents the oscillation length of the measuring tube. The method includes the steps of detecting the stress state of the measuring tube, detecting the stress state of the supporting tube, and correcting the measurement signal on the basis of the detected stress state of the measuring tube and the detected stress state of the supporting tube. A flowmeter for implementing the method is also disclosed.